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## News & Views

## When Does the 21st Century Start?

Time is still relatively ill-defined in LCA, but you will agree that we should at least know in which Century we'll live next year. Actually, there has been considerable confusion about the starting point of the next century and, thus, the third millennium within the framework of the Gregorian calendar which is nearly exclusively used in the Western world and in international relations. Since "The International Journal of Life Cycle Assessment" is being read in many countries outside Europe and the Western world, we feel obliged to give some relevant information.

The Gregorian calendar, which was introduced by Pope Gregory XIII in 1582, improved the older Roman calendar, last time reformed by Julius Caesar (thus called "Julian calendar"). The improvement aimed at a better coincidence of the calendar years with the solar year. The starting point of the earlier Roman calendar (called "ab urbe condita") was the assumed founding year of Rome, 753 BC<sup>2</sup> in the Christian numeration.

This new numeration was introduced in AD<sup>3</sup> 525, about hundred years after the decline of the (West-)Roman Empire.

The source of the confusion about the correct end and start of centuries and millennia lies in the fact that there is no year zero in the Christian numeration: the year AD 1 follows immediately the year 1 BC. Since this is a fact, simple counting tells us that the first decade ended with the completion of the year AD 10, the first Century at the end of the year 100 and the first millennium at the end of the year 1000, etc. The last day of the 20th Century is therefore December 31, 2000 and the first day of the 3rd Millennium is January 1, 2001.

What, if not the next century, are we going to celebrate at the New Year's Eve 1999? Evidently the dawning of the year 2000 – the last year of the 20th Century – and Volume 5 of our Journal!

More information about the Gregorian calendar and the millennium problem can be found at the following websites:

- Royal Greenwich Observatory, Information Leaflet No. 52: "The Year AD 2000" http://www.compinfo.co.uk/y2k/greenwch.htm
- U.S. Naval Observatory, Washington D.C.: When is the New Millennium? <a href="http://www.usno.navy.mil/millennium/whenIs.html">http://www.usno.navy.mil/millennium/whenIs.html</a>
- Walter Schittek: The Next Millennium Starts 2001.
  E-mail: schittek@mailer.uni-marburg.de
  http://staff-www.uni-marburg.de/-schittek/millenni.htm
- Physikalisch-Technische Bundesanstalt: Gregorianischer Kalender. http://www.ptb.de/deutsch/org/4/43/432/greg.htm
- Wiener Arbeitsgemeinschaft für Astronomie: Countdown ins dritte Jahrtausend. <a href="http://members.eunet.at/waa/waa\_special/count2000/count2000.html">http://members.eunet.at/waa/waa\_special/count2000/count2000.html</a>

Walter Klöpffer, editor-in-chief

<sup>&</sup>lt;sup>1</sup> Ab urbe condita (Latin): "Since the foundation of the town"

<sup>&</sup>lt;sup>2</sup> BC: Before Christ (i.e. before the assumed birth date of Jesus Christ)

<sup>&</sup>lt;sup>3</sup> AD: Anno Domini (Latin): "in the year of the Lord"